Organizational Identifiers for DoD

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Unique Identification of DoD Organizations

- Develop a DoD instruction and directive for implementation of Force Management IDs (FMID) for the force structure data in coordination with the Joint Staff that is:
 - Consistent with a joint hierarchal methodology for representing Service force structure
 - Provides guidance on maintaining the currency of the force structure relationships
 - Enables cross communication with existing logistics processes
- Determine and assign life-cycle roles, responsibilities and operational relationships for FMIDs working with NII/CIO
- Ensure the FMID implementation is consistent with the requirements of the Net-Centric Strategy

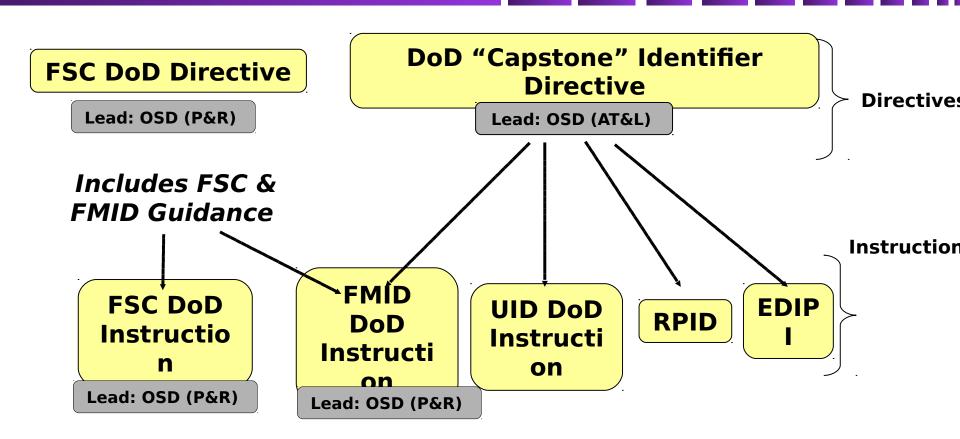
Unique Identification of DoD Organizations

- Determine the unique identification methodology for DoD organizations in coordination with AT&L who will lead external DoD organization IDs
- Define the FMID implementation, structure and process for allocating FMIDs to the DoD Components for assignment to force structure data in collaboration with the Joint Staff and DoD Components
- Maintain the integrity of the CAC/EDI-PI as the unique personnel identifier
 - Integrate use of biometric attributes for personnel authentication

Course Modifications

- Combining the identifier and force structure efforts into one DoD directive
 - SD106 process is closed; responding to comments
 - Target issue date: end of December
 - Schedule series of implementation meetings to construct the instruction (Jan Mar 2005)
- Identifier renamed
 FMID = Force Management Identifier
- FMID scope coordinated with AT&L-led effort to draft overarching DoD directive on identifiers

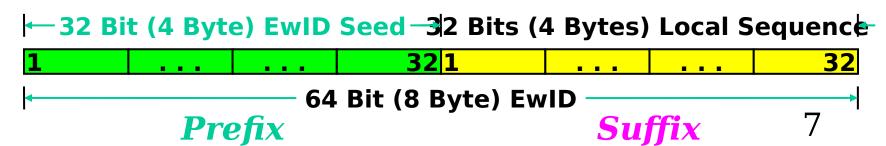
FSC/FMID Directive Update



Backup Charts

Proposed EWID Specification

- An enterprise-wide identifier (EWID) is a 64-bit number used to to uniquely identify any item in any database
- Consists of a four byte (32 bit) "EwID Seed" (obtained through a is obtained from an EwID Seed Server) and a locally appending, four byte (32 bit) suffix
- EwID Seeds are free (see: https://ess.arl.army.mil)
- EwID characteristics & advantages:
 - Registration-based, this allows them to be compact & efficient (no waste)
 - Simple, fixed size easy for software engineers to use
 - Easy to implement (add to legacy DBs as Alt Keys)
 - All data is tagged with a common structure



Pros/Cons of using EWID Specification

Pros

- They are unique and work
- ½ of the size of the UUID, but still accomplish the same function
- Simpler to use in legacy systems
- Able to trace EWID through registration

Cons

- Not an ISO standard
- Registration based
- No real-time capability for obtaining an "EWID seed"
- Mechanism for guaranteeing uniqueness for the "EWID suffix" is required by the generating system

UUID Specification

- Universal Unique Identifier (UUID), developed in the early 1990s, is a 128-bit number guaranteed to be unique
- The UUID is part of ISO 11578 and costs may be incurred to implement
- The UUID mechanism that guarantees Uniqueness is through a combination of hardware addresses, time stamps and random seeds
- Very common scheme for identifiers, used by many systems (e.g., MS Windows uses it to describe essentially every object in the OS)
- There is an ongoing effort to have the specification published as a internet standard (i.e., which may be free)

Pros/Cons of using UUID Specification

Pros

- Approved ISO Standard
- They are unique and work
- In wide use over the Internet and MS Windows operating systems
- Are self-generated No remote call required and no "seed" or "index" to keep

Cons

- Require up to 2x the bandwidth at the tactical level
- Currently costs up to \$10 - \$500 a copy
- Implementing the standard is not simple for legacy systems
- Would require policy, strict oversight, and funding to implement

Proposed Road Ahead

- Use EWIDs as the GFM identifiers
 - Register the EWID as a Uniform Resource Identifier (URI)
 - Treat EWIDS as URIs
 - When tactical bandwidth becomes available, convert existing EWIDs to Type 3 UUIDs
 - Future UUIDs per user selection
- Implement Policy to handle the planned conversion
- Find a permanent home for the EWID Seed Server